To: Allgeier, Steve[Allgeier.Steve@epa.gov]; Magnuson, Matthew[Magnuson.Matthew@epa.gov]
From: Hedrick, Elizabeth
Sent: Mon 2/3/2014 3:28:41 PM
Subject: RE: MCHM and Formaldehyde

Steve,

I would agree with the author that the oxidative degradation pathway of MCHM would be oxidation of the primary alcohol (attached to a carbon with 2 Hs) to an aldehyde (4-methyl cyclohexane -1-carbaldehyde, a chemical with a CAS but I cannot find information on its stability) and the next step would be oxidation of the aldehyde to a carboxylic acid.

I have read that MCHM is a byproduct of 1,4-cyclohexanedimethanol synthesis (CHDM). The other components of the crude MCHM appear to be oxidation products of MCHM or CHDM. Carboxylate (5% of crude), ether (methoxymethyl, 4-22%) and dicarboxylate (dimethyl ester, 1%).

If methanol is in the crude as stated in the Eastman MSDS, then it was likely added and not a byproduct or oxidative degradation product of MCHM.

Elizabeth

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From: Allgeier, Steve
Sent: Monday, February 03, 2014 9:24 AM
To: Hedrick, Elizabeth; Magnuson, Matthew
Subject: FW: MCHM and Formaldehyde

FYI – thought you would find this interesting. If you read it and note anything that sounds untrue, please let me know.

From: Arguto, William
Sent: Monday, February 03, 2014 8:56 AM
To: Allgeier, Steve; Gray, Wendy; binetti, victoria
Subject: MCHM and Formaldehyde

I was trying to find the article that was referenced in our conversation on Friday regarding formaldehyde. I think the link below may be it

http://pipeline.corante.com/archives/2014/01/30/the_west_virginia_formaldehyde_claim_is_nonsense.php